CLAIMS

1. An electrical connector comprising:

a first connector part (20) having an array of connector members (21, 24);

a second connector part (30) having an array of connector members (31, 34) which can mate with the first array of connector members;

the first and second connector parts (20, 30) being movable into a mated position by a closing mechanism which is movable along the arrays;

respective parts of the first and second arrays of connector members having contacts for forming a conductive path when the connector parts are mated with one another; and

force applying means for continuously applying a force between the contacts after the connector parts (20, 30) have been mated.

2. An electrical connector according to claim 1 wherein the force is directed along the longitudinal axis of the arrays of connector members.

3. An electrical connector according to claim 2 wherein the force applying means is arranged to pull the connector members together in a direction which is aligned with the longitudinal axis of the arrays of connector members.

4. An electrical connector according to claim 3 wherein the force applying means is a cord (41) which extends between one end of the array (41A) and a point at least beyond the other end of the array.

5. An electrical connector according to any one of claims 2 to 4 wherein the force applying means is manually operable.

6. An electrical connector according to any one of claims 2 to 4 wherein the force applying means is operable by cooperation between the closing mechanism and the cord.

7. An electrical connector according to any one of the preceding claims wherein at least some of the connector members have a resilient outer coating (26).

8. An electrical connector according to claim 1 wherein the connector members in the second array are arranged to clasp (420) the connector members in the first array.

9. An electrical connector according to claim 8 wherein the connector members in the second array act in a direction which is substantially normal to the longitudinal axis of the arrays of connector members.

10. An electrical connector according to claim 9 wherein the connector members in the second array comprise jaws (421, 422) which are movable in a direction substantially normal to the longitudinal axis of the arrays of connector members.

11. An electrical connector according to claim 10 wherein the jaws (421, 422) are biased into a clasping position and are movable into an open position as the closing mechanism (430) is moved across the jaws.

12. An electrical connector according to claim 8 or 9 wherein the connector members in the second array comprise electrical contacts (225) which are held in a resilient mounting (226).

13. An electrical connector according to claim 1 wherein the force is applied between the first and second arrays of connector members,

perpendicularly to the longitudinal axis of the arrays, and in the plane of the arrays.

14. An electrical connector according to claim 13 wherein each array of connector members comprises a first layer which comprises connector members (301, 321) which provide mechanical interconnection and alignment and a second layer which comprises electrical contacts (305, 325).

15. An electrical connector according to claim 14 wherein the second layer comprises a further set of connector members which provide mechanical interconnection and alignment (355, 365).

16. An electrical connector according to claim 14 or 15 wherein the second layer is resiliently mounted such that a compression force is applied between the contacts.

17. An electrical connector according to claim 13 wherein the first and second connector parts comprise posts (515, 535) and the closing mechanism (520) is arranged to wind a cord (518) around posts of both connector parts whereby to pull the connector parts towards one another.

18. An electrical connector according to claim 13 wherein each of the connector parts comprises a channel which extends along the part and the closing mechanism is arranged to feed a cord (235) along the channel.

19. An electrical connector according to claim 1 wherein the first array of connector members comprises a set of connector members which provide mechanical interconnection and alignment and a flexible strap (615) which carries contacts for forming a conductive path with contacts on the second connector part.

20. An electrical connector according to any one of the preceding claims in the form of a zipper-type connector.

21. A textile article comprising an electrical connector according to any one of the preceding claims.

22. An electronic apparatus comprising an electrical connector according to any one of claims 1 to 20.